

AMENDMENTS TO THE CLAIMS

CLAIM 1 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained control device for a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the control device at least partially above the first chain stay and at least partially below the first seat stay such that the control device can be removed as a unit from the bracket base;

wherein the bracket base has a substantially horizontal upper surface for substantially its entire length, wherein the upper surface is structured to receive a vertically downwardly directed force component from a portion of the control device mounted above it;

a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay; and

a second bracket support for coupling the bracket base to at least one of the first chain stay, the seat tube, and the bottom bracket shell.

CLAIM 2 (ORIGINAL): The apparatus according to claim 1 wherein the first bracket support is adapted to couple the bracket base to the first chain stay, and wherein the second bracket support is adapted to couple the bracket base to the first chain stay.

CLAIM 3 (ORIGINAL): The apparatus according to claim 2 wherein at least one of the first bracket support and the second bracket support is laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 4 (ORIGINAL): The apparatus according to claim 3 wherein the first bracket support and the second bracket support are laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 5 (ORIGINAL): The apparatus according to claim 2 wherein at least one of the first bracket support and the second bracket support extends downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 6 (ORIGINAL): The apparatus according to claim 5 wherein the first bracket support and the second bracket support extend downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 7 (ORIGINAL): The apparatus according to claim 2 wherein the bracket base includes a mounting structure disposed on an upper surface thereof for mounting the control device above the bracket base.

CLAIM 8 (ORIGINAL): The apparatus according to claim 7 wherein the bracket base includes a mounting hole on the upper surface thereof for forming the mounting structure.

CLAIM 9 (ORIGINAL): The apparatus according to claim 2 wherein the bracket base includes a mounting flange extending upwardly from an upper surface thereof for mounting the control device to the bracket base.

CLAIM 10 (ORIGINAL): The apparatus according to claim 9 wherein the mounting flange is disposed at a front of the bracket base.

CLAIM 11 (ORIGINAL): The apparatus according to claim 2 wherein at least one of the first bracket support and the second bracket support is disposed at a front of the bracket base.

CLAIM 12 (ORIGINAL): The apparatus according to claim 11 wherein the first bracket support is disposed behind the second bracket support, and wherein the second bracket support is disposed at a front of the bracket base.

CLAIM 13 (ORIGINAL): The apparatus according to claim 2 wherein the first bracket support includes a first mounting opening, and wherein the second bracket support includes a second mounting opening.

CLAIM 14 (ORIGINAL): The apparatus according to claim 13 wherein the second mounting opening has a threaded inner peripheral surface.

CLAIM 15 (ORIGINAL): The apparatus according to claim 2 wherein an upper surface of the bracket base is substantially flat along substantially its entire length.

CLAIM 16 (ORIGINAL): The apparatus according to claim 2 wherein at least a portion of the first bracket support extends substantially parallel to the second bracket support.

CLAIM 17 (PREVIOUSLY PRESENTED): A bracket apparatus for mounting a control device for a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base for supporting the control device at least partially above the first chain stay;
a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay;

a second bracket support for coupling the bracket base to the first chain stay; and

wherein the bicycle frame has a second chain stay extending rearwardly relative to the seat tube, and further comprising a bracket support bridge adapted to bridge the first chain stay and the second chain stay for coupling the second bracket support to the first chain stay and to the second chain stay.

CLAIM 18 (ORIGINAL): The apparatus according to claim 17 further comprising a clamping band for coupling the first bracket support to the first chain stay.

CLAIM 19 (WITHDRAWN): The apparatus according to claim 1 wherein the first bracket support is adapted to couple the bracket base to the first chain stay, and wherein the second bracket support is adapted to couple the bracket base to the bottom bracket shell.

CLAIM 20 (WITHDRAWN): The apparatus according to claim 19 wherein the second bracket support includes an opening for aligning with an opening in the bottom bracket shell.

CLAIM 21 (WITHDRAWN): The apparatus according to claim 20 wherein the second bracket support includes a chain case mounting structure for mounting a chain case thereto.

CLAIM 22 (WITHDRAWN): The apparatus according to claim 20 further comprising a clamping band for coupling the first bracket support to the first chain stay.

CLAIM 23 (WITHDRAWN): The apparatus according to claim 19 wherein at least one of the first bracket support and the second bracket support is laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 24 (WITHDRAWN): The apparatus according to claim 23 wherein the first bracket support and the second bracket support are laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 25 (WITHDRAWN): The apparatus according to claim 19 wherein at least one of the first bracket support and the second bracket support extends downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 26 (WITHDRAWN): The apparatus according to claim 25 wherein the first bracket support and the second bracket support extend downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 27 (WITHDRAWN): The apparatus according to claim 19 wherein the bracket base includes a mounting structure disposed on an upper surface thereof for mounting the control device above the bracket base.

CLAIM 28 (WITHDRAWN): The apparatus according to claim 27 wherein the bracket base includes a mounting hole on the upper surface thereof for forming the mounting structure.

CLAIM 29 (WITHDRAWN): The apparatus according to claim 19 wherein the bracket base includes a mounting flange extending upwardly from an upper surface thereof for mounting the control device to the bracket base.

CLAIM 30 (WITHDRAWN): The apparatus according to claim 29 wherein the mounting flange is disposed at a front of the bracket base.

CLAIM 31 (WITHDRAWN): The apparatus according to claim 19 wherein at least one of the first bracket support and the second bracket support is disposed at a front of the bracket base.

CLAIM 32 (WITHDRAWN): The apparatus according to claim 31 wherein the first bracket support is disposed behind the second bracket support, and wherein the second bracket support is disposed at a front of the bracket base.

CLAIM 33 (WITHDRAWN): The apparatus according to claim 19 wherein the first bracket support includes a first mounting opening, and wherein the second bracket support includes a second mounting opening.

CLAIM 34 (WITHDRAWN): The apparatus according to claim 19 wherein an upper surface of the bracket base is substantially flat along substantially its entire length.

CLAIM 35 (WITHDRAWN): The apparatus according to claim 19 wherein at least a portion of the second bracket support extends substantially parallel to the first bracket support.

CLAIM 36 (WITHDRAWN): The apparatus according to claim 1 wherein the first bracket support is adapted to couple the bracket base to the first chain stay, and wherein the second bracket support is adapted to couple the bracket base to the seat tube.

CLAIM 37 (WITHDRAWN): The apparatus according to claim 36 wherein at least one of the first bracket support and the second bracket support is laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 38 (WITHDRAWN): The apparatus according to claim 37 wherein the first bracket support and the second bracket support are laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 39 (WITHDRAWN): The apparatus according to claim 36 wherein at least one of the first bracket support and the second bracket support extends downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 40 (WITHDRAWN): The apparatus according to claim 39 wherein the first bracket support and the second bracket support extend downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 41 (WITHDRAWN): The apparatus according to claim 36 wherein the bracket base includes a mounting structure disposed on an upper surface thereof for mounting the control device above the bracket base.

CLAIM 42 (WITHDRAWN): The apparatus according to claim 41 wherein the bracket base includes a mounting hole on the upper surface thereof for forming the mounting structure.

CLAIM 43 (WITHDRAWN): The apparatus according to claim 36 wherein the bracket base includes a mounting flange extending upwardly from an upper surface thereof for mounting the control device to the bracket base.

CLAIM 44 (WITHDRAWN): The apparatus according to claim 43 wherein the mounting flange is disposed at a front of the bracket base.

CLAIM 45 (WITHDRAWN): The apparatus according to claim 36 wherein at least one of the first bracket support and the second bracket support is disposed at a front of the bracket base.

CLAIM 46 (WITHDRAWN): The apparatus according to claim 45 wherein the first bracket support is disposed behind the second bracket support, and wherein the second bracket support is disposed at a front of the bracket base.

CLAIM 47 (WITHDRAWN): The apparatus according to claim 36 wherein the first bracket support includes a first mounting opening, and wherein the second bracket support includes a second mounting opening.

CLAIM 48 (WITHDRAWN): The apparatus according to claim 36 wherein an upper surface of the bracket base is substantially flat along substantially its entire length.

CLAIM 49 (WITHDRAWN): The apparatus according to claim 36 further comprising a first clamping band for coupling the first bracket support to the first chain stay.

CLAIM 50 (WITHDRAWN): The apparatus according to claim 49 further comprising a second clamping band for coupling the second bracket support to the seat tube.

CLAIM 51 (WITHDRAWN): The apparatus according to claim 36 further comprising a clamping band for coupling the second bracket support to the seat tube.

CLAIM 52 (WITHDRAWN): The apparatus according to claim 1 wherein the first bracket support is adapted to couple the bracket base to the first seat stay, and wherein the second bracket support is adapted to couple the bracket base to the first chain stay.

CLAIM 53 (WITHDRAWN): The apparatus according to claim 52 wherein at least one of the first bracket support and the second bracket support is laterally offset from a center of the bracket base when viewed from a front of the bracket base.

CLAIM 54 (WITHDRAWN): The apparatus according to claim 52 wherein the second bracket support extends downwardly from a lateral side of the bracket base when viewed from a front of the bracket base.

CLAIM 55 (WITHDRAWN): The apparatus according to claim 54 wherein the first bracket support extends rearwardly from the bracket base.

CLAIM 56 (WITHDRAWN): The apparatus according to claim 52 wherein the bracket base includes a mounting structure disposed on an upper surface thereof for mounting the control device above the bracket base.

CLAIM 57 (WITHDRAWN): The apparatus according to claim 56 wherein the bracket base includes a mounting hole on the upper surface thereof for forming the mounting structure.

CLAIM 58 (WITHDRAWN): The apparatus according to claim 52 wherein the bracket base includes a mounting flange extending upwardly from an upper surface thereof for mounting the control device to the bracket base.

CLAIM 59 (WITHDRAWN): The apparatus according to claim 58 wherein the mounting flange is disposed at a front of the bracket base.

CLAIM 60 (WITHDRAWN): The apparatus according to claim 52 wherein the second bracket support is disposed at a front of the bracket base.

CLAIM 61 (WITHDRAWN): The apparatus according to claim 60 wherein the first bracket support is disposed behind the second bracket support and extends rearwardly from the bracket base, and wherein the second bracket support is disposed at a front of the bracket base.

CLAIM 62 (WITHDRAWN): The apparatus according to claim 52 wherein the first bracket support includes a first mounting opening, and wherein the second bracket support includes a second mounting opening.

CLAIM 63 (WITHDRAWN): The apparatus according to claim 52 wherein an upper surface of the bracket base is substantially flat along substantially its entire length.

CLAIM 64 (WITHDRAWN): The apparatus according to claim 52 wherein the bicycle frame is of the type having a second chain stay extending rearwardly relative to the seat tube, and further comprising a bracket support bridge adapted to bridge the first chain stay and the second chain stay for coupling the second bracket support to the first chain stay and to the second chain stay.

CLAIM 65 (WITHDRAWN): The apparatus according to claim 64 further comprising a clamping band for coupling the first bracket support to the first seat stay.

CLAIM 66 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained control device for a bicycle to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending

rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the control device at least partially above the first chain stay and at least partially below the first seat stay such that the control device can be removed as a unit from the bracket base;

wherein the bracket base has a substantially horizontal upper surface for substantially its entire length, wherein the upper surface is structured to receive a vertically downwardly directed force component from a portion of the control device mounted above it, and wherein the upper surface does not form a part of the control device; and

a bracket support extending from the bracket base for coupling the bracket base to at least one of the first chain stay, the first seat stay, the seat tube, and the bottom bracket shell.

CLAIM 67 (ORIGINAL): The apparatus according to claim 66 wherein the bracket base has a substantially horizontal mounting surface for mounting the control device to the bracket base.

CLAIM 68 (PREVIOUSLY PRESENTED): A bracket apparatus for mounting a control device for a bicycle to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base for supporting the control device at least partially above the first chain stay;

wherein the bracket base has a substantially horizontal mounting surface for mounting the control device to the bracket base;

a bracket support extending from the bracket base for coupling the bracket base to the first chain stay; and

wherein the bicycle frame has a second chain stay extending rearwardly relative to the seat tube, and further comprising a bracket support bridge adapted to bridge the first chain stay and the second chain stay for coupling the bracket support to the first chain stay and to the second chain stay.

CLAIM 69 (ORIGINAL): The apparatus according to claim 66 wherein the bracket base has a substantially vertical mounting surface for mounting the control device to the bracket base.

CLAIM 70 (PREVIOUSLY PRESENTED): A bracket apparatus for mounting a control device for a bicycle to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base for supporting the control device at least partially above the first chain stay; wherein the bracket base has a substantially vertical mounting surface for mounting the control device to the bracket base;

a bracket support extending from the bracket base for coupling the bracket base to the first chain stay; and

wherein the bicycle frame has a second chain stay extending rearwardly relative to the seat tube, and further comprising a bracket support bridge adapted to bridge the first chain stay and to the second chain stay for coupling the bracket support to the first chain stay and to the second chain stay.

CLAIM 71 (ORIGINAL): The apparatus according to claim 70 wherein the bracket support bridge includes:

a bracket support mounting wall for mounting the bracket support bridge to the bracket support; and

a clamping member for mounting the bracket support bridge to the first chain stay and to the second chain stay.

CLAIM 72 (ORIGINAL): The apparatus according to claim 71 wherein the clamping member is substantially horizontal, and wherein the bracket support mounting wall extends upwardly from the clamping member.

CLAIM 73 (ORIGINAL): The apparatus according to claim 72 wherein the bracket support mounting wall includes an elongated opening for adjusting a vertical position of the bracket support bridge relative to the bracket support.

CLAIM 74 (WITHDRAWN): The apparatus according to claim 72 further comprising a bracket support ear extending from the bracket support mounting wall.

CLAIM 75 (WITHDRAWN): The apparatus according to claim 74 wherein the bracket support mounting wall, the clamping member and the bracket support ear are substantially orthogonal to each other.

CLAIM 76 (WITHDRAWN): The apparatus according to claim 69 further comprising a brace extending substantially horizontally from the bracket base for mounting the control device to the bracket base.

CLAIM 77 (ORIGINAL): The apparatus according to claim 66 wherein the bracket support extends downwardly from the bracket base.

CLAIM 78 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained control device for a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the control device at least partially above the first chain stay and at least partially below the first seat stay such that the control device can be removed as a unit from the bracket base;

a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay;

a second bracket support for coupling the bracket base to at least one of the first chain stay, the seat tube, and the bottom bracket shell; and

wherein the bracket base has an upper surface that extends laterally in a horizontal direction beyond the first bracket support and the second bracket support.

CLAIM 79 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained control device for a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the control device at least partially above the first chain stay and at least partially below the first seat stay such that the control device can be removed as a unit from the bracket base;

wherein the bracket base includes a mounting surface extending vertically upwardly from an upper surface thereof, wherein the upper surface is structured to receive a vertically downwardly directed force component from a portion of the control device mounted above it;

a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay; and

a second bracket support for coupling the bracket base to at least one of the first chain stay, the seat tube, and the bottom bracket shell.

CLAIM 80 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained control device for a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the control device at least partially above the first chain stay and at least partially below the first seat stay such that the control device can be removed as a unit from the bracket base;

wherein the bracket base has an upper surface that is structured to receive a vertically downwardly directed force component from a portion of the control device mounted above it;

a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay; and

a second bracket support for coupling the bracket base to at least one of the first chain stay, the seat tube, and the bottom bracket shell.

CLAIM 81 (PREVIOUSLY PRESENTED): The apparatus according to claim 80 wherein the upper surface is substantially horizontal from the first bracket support to the second bracket support.

CLAIM 82 (CURRENTLY AMENDED): A bracket apparatus for mounting a separate self-contained motor that controls a bicycle transmission to a bicycle frame, wherein the frame has a bottom bracket shell, a seat tube extending upwardly relative to the bottom bracket shell, a first chain stay extending rearwardly relative to the seat tube and a first seat stay extending rearwardly relative to the seat tube above the first chain stay, wherein the apparatus comprises:

a bracket base dimensioned for supporting the motor at least partially above the first chain stay and at least partially below the first seat stay such that the motor can be removed as a unit from the bracket base;

wherein the bracket base has an upper surface that supports the motor so as to receive a vertically downwardly directed force component from a portion of the motor mounted above it;

a first bracket support for coupling the bracket base to at least one of the first chain stay and the first seat stay; and

a second bracket support for coupling the bracket base to at least one of the first chain stay, the seat tube, and the bottom bracket shell.